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May 22, 2003

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

**LAC+USC MEDICAL CENTER REPLACEMENT PROJECT
APPROVAL OF CHANGE IN IDENTIFIED MEDICAL EQUIPMENT AND
AUTHORIZATION OF RELATED CONSTRUCTION CHANGE ORDER
SPECS. 6550; C.P. 70787
SUPERVISORIAL DISTRICT 1
4 VOTES**

**JOINT RECOMMENDATION WITH THE CHIEF ADMINISTRATIVE OFFICER AND
THE DIRECTOR OF PUBLIC WORKS THAT YOUR BOARD:**

1. Approve the substitution of a high intensity linear accelerator instead of a medium intensity linear accelerator at an estimated total cost not to exceed \$818,345, including \$555,000 in additional medical equipment costs, \$63,845 in additional architectural design fees, \$198,000 in additional construction costs, and \$1,500 in miscellaneous permitting expenditures, to be funded with short and medium term financing within the previously approved project budget.
2. Approve and authorize the Director of Public Works to execute a Change-Order to Contract PW-12641 with McCarthy/Clark/Hunt, a Joint Venture, (MCH) for construction work necessary to accommodate the change for an amount not to exceed \$198,000.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The recommended actions will upgrade one of three linear accelerators, used in the treatment of cancer patients, to allow greater flexibility in the delivery and scheduling of radiation oncology services and the ability to provide the most medically appropriate radiation treatments to the greatest number of patients. In addition, the recommended actions will allow the Department of Public Works to implement changes to the building necessary to accommodate the change in the equipment, without impacting the current construction schedule or sequence. The Project Advisory Committee for the Replacement Project has reviewed and concurred with the requested change.

Background: Medical Equipment Changes

The fixed medical equipment that would be utilized in the replacement hospital was identified during the programming phase of the project in 1998 and 1999 based upon input from the medical staff. Since that time, the medical equipment has been routinely updated by the architectural team for changes in technology and availability but a comprehensive review by the medical staff has not taken place since the original programming phase.

Over the past year and a half, the Department of Public Works, the architectural team and the medical staff at the LAC+USC Medical Center have been reviewing and finalizing the performance specifications for approximately 263 pieces of fixed medical equipment that will be purchased as part of the capital project in preparation for the solicitation of proposals and bids by the Internal Services Department. During this process, the Department of Health Services has identified and requested seven changes to the current medical equipment listing, which are currently under review by the Chief Administrative Office. Most of the requested changes have minimal impact on the building design, but two are likely to result in change orders to the construction contract in excess of \$150,000 and therefore require your Board's approval prior to the implementation of the change. The change in the linear accelerator is the first of these changes, as the equipment is located on the first floor of the Outpatient Department. The second, which involves a change in one of the magnetic resonance imaging machines, is currently under review by the Chief Administrative Office.

Linear Accelerator Change

Linear accelerators are used to apply radiation to malignant cells in the treatment of cancer patients. Based upon patient levels and treatment protocols at the time of the original programming, it was determined that two of the three linear accelerators to be installed in the Replacement Project should be capable of producing high doses of radiation and the third linear accelerator could be capable of producing only mid-level doses of radiation.

Since that time, the number of patients requiring higher doses of radiation has increased and the trend in current treatment protocols and the community standard is to

provide patients with the higher doses of radiation. While a medium intensity linear accelerator can primarily be used to reduce the symptoms of cancer, the high intensity linear accelerator allows the malignant cells to be destroyed. In addition, the high intensity linear accelerator provides for greater precision during treatment by targeting the radiation on the malignant cells and thus minimizing damage to normal tissue surrounding the cancer.

As the high intensity linear accelerator can also provide the doses of radiation available in the medium intensity range, the change will provide the Department of Health Services with greater flexibility in the treatment of patients in the future based upon the appropriate medical protocols. In addition, it will allow the department to accommodate routine maintenance on the machines without impacting the care of these cancer patients.

Construction Change Order

The change in the linear accelerator is expected to result in a change order to the construction contract. Based upon preliminary information, the construction change is not to exceed \$198,000. The additional cost is primarily associated with an anticipated increase in lead and steel radiation shielding as well as providing a larger shielding door and related upgrades to door jambs.

The proposed change in equipment, however, also affects the location of interior concrete walls on the first floor of the Outpatient Department Building and the associated footings for those walls in order to accommodate the larger size of the equipment. As the contractor has started construction work at the Outpatient Department Building, we are requesting your Board's authority for the change order now so that the Department of Public Works can begin implementing the changes, as required by the construction sequence. Both the design and construction of the changes will be implemented in phases as required to maintain the construction schedule. The Department of Public Works will utilize proceed orders with specific "not to exceed" amounts until such time as the entire cost of the change can be negotiated.

A preliminary description of the anticipated scope of the change order is included at Enclosure C.

Project Advisory Committee

The Replacement Project's Project Advisory Committee, which was established by the Chief Administrative Officer to provide independent oversight and advice to the CAO on the project's progress, reviewed and concurred with the departments' recommendation to substitute the high intensity linear accelerator for the medium intensity linear accelerator. The Project Advisory Committee will monitor the implementation of the change and review the final negotiated change order to the construction contract prior to its execution.

Implementation of Strategic Plan Goals

The recommended actions are consistent with the County's Strategic Plan Goals of Fiscal Responsibility and Children and Families Well-Being by investing in public healthcare infrastructure and providing the highest level of available cancer treatments.

FISCAL IMPACT/FINANCING

On December 3, 2002, your Board approved a total project budget of \$820,558,000, which included a medical equipment budget of \$96,964,000. The recommended actions are estimated to cost \$818,345 but will not result in an increase to the approved budget as there are sufficient contingency funds in the budget to cover these costs. The Project Schedule and Budget Summary are included in Enclosure A.

The additional equipment, design and permitting costs will be funded with contingency funds already included in the approved project budget. The medical equipment budget includes both a planning contingency that was intended to allow for changes in the identification of the original medical equipment for technological or operating efficiency reasons and an installation contingency that was intended to provide for changes in medical equipment costs resulting from the bid and proposal process, as well changes that may be required to coordinate the installation within the construction sequence. As none of the planning contingency has been used to date, there is sufficient funding available within the equipment budget item to fund the estimated \$555,000 increase in equipment costs.

The approved budget also retained approximately \$2.1 million in contingency funds for additional architectural and engineering services and \$769,906 for permitting and plan check fees. To date, none of these funds have been used. Therefore, it is recommended that the additional design costs of \$63,845 and the estimated permitting and plan check fees of \$1,500 be funded from these contingencies.

It is recommended that the construction costs arising from the proposed change be funded through savings from the original base bid that have been identified since contract award. Since the award of the construction contract on December 3, 2002, MCH has identified approximately \$8.4 million of potential savings to the County from its original bid amount from minor modifications or clarifications to the plans and specifications or procedures (means and methods). Of this amount, the departments have accepted approximately \$2.5 million and Public Works is actively considering the balance with the impacted departments.

The Chief Administrative Office is recommending that the identified savings, as well as any additional savings that are ultimately accepted by the departments, be set aside to fund department-requested changes to the replacement facility that may be required to accommodate technological changes, improve medical treatment or create operational efficiencies provided that the changes can be accomplished within the existing project schedule.

All such requests will require the review and approval of the Chief Administrative Office in accordance with the Board-approved Capital Project Process, will be subject to an independent review by the Project Advisory Committee and, if the change has a possibility of resulting in a construction change order of more than \$150,000, will be brought to your Board for approval prior to implementing the change.

The project is funded through Federal and State disaster aid moneys (\$468,970,000), a Federal Emergency Management Agency Hazard Mitigation Grant (\$1,820,000) and various miscellaneous revenue sources (e.g. interest earnings) of approximately \$1,000,000. In addition, approximately \$17,310,000 of the project costs were paid as part of the previous 946-bed replacement facility, including \$12,250,000 in land acquisition costs, \$1,460,000 of utility relocations, and \$3,600,000 of OSHPD permitting fees. The remaining \$331,460,000 of project costs will be funded through a financing program managed by the Treasurer and Tax Collector, as approved by your Board on December 3, 2002.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The proposed change order requires your Board's approval because it is expected to exceed the \$150,000 limit delegated to the Director of Public Works pursuant to Public Contract Code Section 20142. If it is found, after negotiations with MCH, that the final value of the change order exceeds the preliminary cost that has currently been estimated, we will return to your Board for approval.

A supplemental agreement for the additional architectural design services will be executed through the Department of Public Works under delegated authority in accordance with Section 2.18.030 et. seq. of the County Code.

On December 3, 2002, your Board approved a revised project budget of \$820,558,000 which included \$96,964,000 for the procurement of fixed medical equipment. The procurement process will be managed by the Internal Services Department under the Statutory Authority of the County Purchasing Agent. ISD, in cooperation with the Department of Public Works, the Chief Administrative Office, and Health Services, will solicit bids and purchase the required equipment in accordance with the standard County purchasing policies and procedures.

ENVIRONMENTAL DOCUMENTATION

On June 6, 2000, your Board certified the Environmental Impact Report/Environmental Assessment for the project. On June 7, 2000, FEMA issued a Finding of No Significant Impact for the project and approved the EIR/EA.

CONTRACTING PROCESS

Design Services

On October 1, 1998, your Board awarded agreement PW11875 for \$45,025,000 to HOK/LBL to provide architectural design services, construction administration and medical equipment planning for the LAC+USC Medical Center Replacement Project.

The proposed change will require revising the configuration of the linear accelerator area to accommodate three high intensity linear accelerators instead of the two high intensity and one medium intensity linear accelerators contemplated in the project program. The revisions will include redesigning the sizes of the linear accelerators rooms without changing the overall boundaries allocated to the linear accelerator area, revising the wall thickness, increasing lead and steel radiation shielding in the walls and ceiling, changing the size of a neutron shielding door, and miscellaneous design revisions to the mechanical, electrical and plumbing systems.

HOK/LBL has reviewed the scope of work and submitted a proposal for these supplemental services in the amount of not to exceed \$63,845. Public Works considers this fee to be fair and reasonable for the work involved. This represents a 0.14% increase to the current contract and increases the not to exceed contract amount from \$45,020,000 to \$45,083,845. The scope of services is described in enclosure B.

Construction Change Order.

On December 3, 2002, your Board awarded contract PW 12461 to MCH for \$497,883,000 to construct the LAC+USC Medical Center Replacement Project.

The contract documents provided space for two high intensity linear accelerators and one medium intensity linear accelerator. As a result of the proposed changes, the contractor must provide work beyond that included in the contract documents. Because the contractor has not yet started to work in the affected area, implementing the proposed changes now will mitigate higher construction costs resulting from schedule delay impact. Additional construction costs are anticipated primarily from increased radiation shielding in the walls and ceilings, and a larger shielding door.

This work constitutes a change to the work as defined in Section 12 of the General Conditions of the Contract. The full scope of work cannot be assessed accurately until the architect of record has completed the design work, but it is estimated not to exceed \$198,000. The approximate scope of work is described in enclosure C.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The existing hospital and all patient care services will remain operational throughout the entire construction period. The project specifications include instructions to the

The Honorable Board of Supervisors

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contractor to comply with specific construction constraints from the EIR/EA that will be used to control construction-generated dust, noise, and traffic within acceptable thresholds.

CONCLUSION

Please return one adopted copy of this letter to the Chief Administrative Office (Capital Projects), Health Services, and Public Works.

Respectfully submitted,

JAMES A. NOYES
Director of Public Works

DAVID E. JANSSEN
Chief Administrative Officer

THOMAS L. GARTHWAITE, M.D.
Director of Health Services

AMT:mh
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Enclosures

cc: County Counsel
Department of Public Social Services (GAIN/GROW Program)
Office of Affirmative Action Compliance

ENCLOSURE A

**LAC+USC MEDICAL CENTER REPLACEMENT PROJECT
MEDICAL EQUIPMENT CHANGE ORDER 1
SPECS. 6550; C.P. 70787**

I. PROJECT SCHEDULE

Project Activity	Scheduled Completion Date	Actual Completion Date
Board Award Design Contract	07/98	07/98
Construction Documents	09/00	09/00
Jurisdictional Approvals	05/02	05/02
Award of Construction	12/03	12/03
Construction Start	01/03	01/03
Acceptance of Project	04/07	

II. PROJECT BUDGET SUMMARY

BUDGET CATEGORY	CURRENT BOARD APPROVED BUDGET	IMPACT OF THIS ACTION	REVISED PROJECT BUDGET
Land Acquisition	\$ 12,250,000	\$ 0	\$ 12,250,000
Make Ready (Bid Package A-1)	\$ 9,800,000	\$ 0	\$ 9,800,000
Construction			
Site Preparation	\$ 11,813,750	\$ 0	\$ 11,813,750
Remaining Construction Work			
(a) Base Bid	\$497,883,000	\$ 0	\$497,883,000
(b) Base Isolator Bearings	\$ 814,626	\$ 0	\$ 814,626
(c) Contingency (7.9 percent)	<u>\$ 39,488,624</u>	<u>\$ 0</u>	<u>\$ 39,488,624</u>
Remaining Work Subtotal	\$538,186,250	\$ 0	\$538,186,250
Construction Total	\$550,000,000	\$ 0	\$550,000,000
Equipment (Medical, Telecommunications/Data, and FFE)	\$ 96,964,000	\$ 0	\$ 96,964,000
Architectural Services	\$ 49,600,000	\$ 0	\$ 49,600,000
Consultants and Vendor Services	\$ 72,498,000	\$ 0	\$ 72,498,000
Permits and Fees	\$ 9,112,000	\$ 0	\$ 9,112,000
County Services	\$ 20,334,000	\$ 0	\$ 20,334,000
TOTAL	\$820,558,000	\$ 0	\$820,558,000

ENCLOSURE B

LAC+USC MEDICAL CENTER REPLACEMENT PROJECT CONSULTANT SERVICES AGREEMENT HOK/LBL SPECS. 6550; C.P. 70787

The services to be rendered by HOK/LBL will consist of revising and modifying the agency approved drawings to accommodate three high intensity linear accelerators instead of the two high intensity and one medium intensity linear accelerators as originally designed. The scope of services shall be as outlined in the consultant's proposal dated November 11, 2002, The scope of services will include all professional services rendered normally for this kind of service including, but not limited to:

SCOPE OF SERVICES

The work will consist of providing revisions to the areas allocated in the Outpatient Department Building to accommodate three high intensity linear accelerators. The design revisions will include, but not be limited to, the following design disciplines and building elements:

1. Structural design as it relates to changes to foundations, walls and ceilings
2. Architectural design as it relates to changed room configuration and layout to accommodate three high-intensity linear accelerators without extending the area allocated to the linear accelerators contemplated in the original design.
3. Revisions to mechanical, electrical and plumbing installations to accommodate the revised layout of the rooms.
4. Assessment and revisions, as required, to radiation shielding of the linear accelerators rooms.
5. Special reports, analyses and presentations as required.
6. Assistance in obtaining agency permits if required.
7. Issuance of Information Bulletins as required.
8. Inclusion of the revisions in Record Drawings.

SCHEDULE

The consultant will complete the required services within 21 calendar days after the Notice to proceed with the work has been issued by the Project Director.

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COMPENSATION

HOK/LBL shall complete the services for a not to exceed fee of \$63,845. After completion of the work, HOK/LBL shall submit a payment request for the work completed. The payment request will include enough information to substantiate the amount claimed including, but not being limited to, expenditures on an hourly basis according to the job title and hourly rate of each employee performing work. Payment will be made following approval by the County.

The total fee for the work is as follows:

Design Cost	\$52,000
Special Reviews, Reports and Permitting	<u>\$11,845</u>
Total not-to exceed Fee	\$63,845

ENCLOSURE C

LAC+USC MEDICAL CENTER REPLACEMENT PROJECT CONSTRUCTION CHANGE ORDER MCCARTHY/CLARK/HUNT, A JOINT VENTURE SPECS. 6550; C.P. 70787

The work to be performed by MCH under this change order will consist of the additional construction work required to install three high intensity linear accelerators instead of the two high intensity and one medium intensity linear accelerators contemplated by the agency approved drawings. The scope of services will include, but not be limited to:

SCOPE OF WORK

The work will consist of providing additional construction work in the areas allocated in the Outpatient Department Building to accommodate three high intensity linear accelerators. The scope of work will not be fully known until the architect has completed the required design revisions, but at this time it is estimated to include:

1. Approximately 1,800 square feet of additional lead radiation shielding in walls.
2. Approximately 35 tons of additional steel radiation shielding in ceilings.
3. Enlarge one neutron-shielding door and upgrade doorjamb.
4. Foundations may need to be widened and walls may need to be built in slightly different locations and made thinner, but overall it is estimated that the overall cost of foundations and walls will remain the same.
5. Mechanical, electrical and plumbing services will remain the same although their locations may be revised to match the new linear accelerators layout.

SCHEDULE

The contractor will commence the work after the Notice to Proceed with the work has been issued by the Project Director, and complete the work in coordination with the approved project schedule.

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COMPENSATION

Until the architect has completed the revisions to the agency approved drawings, the cost of the change order cannot be known with certainty. However, the engineer has estimated a rough order of magnitude cost for the work of approximately \$198,000. In order to not impact the project schedule it is desirable to issue one or more Proceed Orders to MCH, in accordance with Section 12.A.5 of the General Conditions of the Contract, in an aggregate amount not to exceed the current estimated cost for the change. The final amount of the change order will be negotiated with MCH, after the architect has completed the design revisions, and a Change Order will be issued as stipulated in the above section of the General Conditions of the Contract. If the negotiated value of the Change Order exceeds the value of the Proceed Order, we will return to your Board for approval.

Payment will be made following approval by the County of the completed work.